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SENT VIA EMAIL

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Dear Mr. Gildea:

Thank you for your April 15, 2019, letter with your comments on the draft Valued Components (VC) Selection Document for the proposed Michel Coal Project (Michel Coal). We have copied your comments below and included responses from the Environmental Assessment Office (EAO).

United States (US) Environmental Protection Agency (EPA) Comment #1

With regard to new mine development, the Elk Valley Water Quality Plan (EVWQP) indicates that development of new mines in the Elk Valley will require re-examination of the Plan (EVWQP, Chapter 11). We recommend that the Draft VC Document or upcoming Application Information Requirements clearly describe the relationship between the EVWQP and the EA, water management plans, and potential future permit requirements for the Michel Coal Project. In addition, we recommend that the VC Document acknowledge the potential for future changes to the EVWQP as a result of new mining projects and the potential effect upon any Lake Koocanusa site-specific water quality criteria that may be developed and adopted.

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EAO Response

As you are aware, the EVWQP was developed by Teck Coal Limited (Teck) in response to a Ministerial Order issued in April 2013 under the *Environmental Management Act* (EMA). The Ministry of Environment and Climate Change Strategy (ENV) has clarified that the EVWQP applies to all water-related decisions made under EMA within the designated area defined as the Elk Valley, including the Canadian portion of the Koocanusa Reservoir. Re-examination of the EVWQP is not required for new mines, but rather proposed new coal projects are required to demonstrate in their Environmental Assessment (EA) Certificate Application that they will meet the requirements of the EVWQP. The EVWQP thus ensures that any future decisions affecting water quality are made within the context of the entire watershed and not just individual sites. The EAO and ENV have met with proponents of proposed coal projects in the Elk Valley, including North Coal Ltd. (North Coal), who is proposing Michel Coal, regarding the EVWQP and incorporation of this plan in the EA.

Appendix A to this letter identifies the goals established for water quality in the EVWQP and how that plan is applicable to future proposed coal projects, including the Michel Coal. North Coal is very much aware of the water quality requirements and will include more detailed information in their draft Application Information Requirements (AIR) related to this requirement. ENV and the US EPA, as members of the EAO's Working Group, will have opportunities to review and comment on drafts of the AIR.

North Coal's compliance with the EVWQP will be regulated under the EMA via permit requirements. This requirement includes any future changes to the EVWQP water quality targets, such as for Selenium in the Koocanusa Reservoir, should these occur following issuance of an EA Certificate.

The VC Selection Document is not the appropriate document to reflect your comments regarding potential future changes to the EVWQP or water quality criteria. The EAO will direct North Coal to include wording in the draft AIR describing how they will follow the EVWQP and any adjustments to that plan.

US EPA Comment #2

The Regional Study Areas (RSAs) for the aquatic resource VCs end at the US/Canada border, which may not allow the extent of project-related and cumulative effects to be understood and put in perspective. The Project is likely to result in additional (cumulative) pollutant loadings and impacts to US water resources. As a result, EPA recommends that the RSA for surface water resources be defined to include all portions of the environment that could be affected, including the US portion of Lake Koocanusa and the Kootenai River.

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EAO Response

North Coal has considered initial predictions for potential effects to water quality to establish study area boundaries for the EA. The local study area (LSA) where direct and indirect effects from the project may occur is predicted to extend to the confluence of Michel Creek and Alexander Creek. The RSA includes the entire Elk River watershed and Lake Koocanusa up to the US border, matching the area defined under the EVWQP. North Coal is planning to develop a mine with no adverse water quality effects at the Koocanusa Reservoir. This intent must be substantiated through a robust, scientific assessment presented in North Coal's EA Certificate Application. As a member of the Working Group, the US EPA will have the opportunity to review the detailed modelling methods and results used in the EA for Michel Coal. The EAO is satisfied that the EA methodology will identify and assess any potential transboundary effects at the US Border.

US EPA Comment #3

The document states that, "North Coal cannot compute contributions to Lake Koocanusa as it does not have access to the EVWQP Model; however, Lake Koocanusa will be included in the RSA when considering potential cumulative effects and effects to fish." EPA is pleased see that Lake Koocanusa will be included in the RSA. However, we believe that cumulative impacts to Lake Koocanusa and the surrounding watershed must be considered as VCs and cumulative contributions to the lake must be computed.

EAO Response

In North Coal's EA Certificate Application, all VCs that are predicted to have residual adverse project effects will undergo an assessment of the potential cumulative effects from past, present and reasonably foreseeable projects. In the case of impacts on water quality in the Elk River and the Koocanusa reservoir, the RSA boundary will be used for the cumulative effects assessment and this boundary is consistent with the geographic area covered under the EVWQP. As previously discussed, in the next phase of the BC EA process, the AIR will be developed providing details on the assessments and studies that will be required for the EA Certificate Application including cumulative effects assessments. The US EPA as a member of the technical Working Group will have an opportunity to comment on drafts of the AIR.

US EPA Comment #4

The RSA for terrestrial resource VCs ends at the US/Canada border which may not allow the extent of project-related and cumulative effects to be understood and put in perspective. As a result, EPA recommends that the RSA for terrestrial resources be defined to include all portions of the environment that could be affected, including those portions within the US.

EAO Response

In a provincial EA, the LSA is the area where direct and indirect adverse project effects are predicted. The RSA is used to provide context for that VC and also serve in some cases as the area for a cumulative effects assessment, depending on whether there is a residual adverse effect and the extent of the overlap of that effect with past, current and foreseeable projects. In an EA, it is possible that study area boundaries are adjusted based on additional information obtained from proponents as they prepare their EA Certificate Application and the extent of projects effects becomes clearer. The EAO's guidance for preparing the AIR takes into account this situation and the AIR template states, "the Application will include the rationale for any differences in boundaries from those presented in the final AIR."

US EPA Comment #5

The Temporal Boundaries are to include the construction, operation, and decommissioning phases of the Project. The Draft VC Document indicates that temporal boundaries of the analysis will end with post operations or closure. We recommend that the analysis include a period after the mine ceases operations and surface reclamation has been completed. Depending on the success of mitigation measures to reduce seepage and capping of the waste rock piles, water quality and other VCs may continue to be affected many years after the mine ceases operations.

EAO Response

The potential effects from the decommissioning of Michel Coal are a required part of the EA, as are closure/post-closure considerations. North Coal will be required to describe in their EA Application the monitoring and follow-up programs and in particular the closure and post-closure water management activities. This information will be provided at a level consistent with EA-level requirements. It should be noted that mine reclamation is mandated under the *Mines Act* and for North Coal to receive a *Mines Act* Permit, they will be required to present a detailed reclamation plan to the satisfaction of the BC Ministry of Energy, Mines and Petroleum Resources (EMPR). This reclamation plan would require updating every five years once a permit is in place. Only if an EA Certificate is granted, could a *Mines Act* Permit be issued.

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Through development of the EA Certificate Application and detailed water quality modeling, North Coal will determine the need for water treatment facilities. If such a mitigation measure is required to reduce or avoid adverse effects to water quality, changes to the closure and post-closure time frames would be presented in the EA Certificate Application. Any water treatment would be managed under an EMA permit for the life of mine and beyond.

The EAO proposes a meeting with the US EPA to discuss how projects reviewed under the *Environmental Assessment Act* fit into this a regulatory continuum for the protection of water quality. This regulatory continuum includes subsequent permitting under the EMA and how a mine is regulated from exploration to post-closure under the *Mines Act*. If the US EPA agrees that a meeting would be helpful, the EAO would invite relevant staff from ENV and EMPR to the meeting.

US EPA Comment #6

Section 4 of the Draft VC Document identifies the consultation and engagement that has occurred in development of the issues. EPA recommends that future consultation and engagement include the Confederated Salish and Kootenai Tribes (CSKT) and the Kootenai Tribe of Idaho (KTOI) since these tribes have ties to, and interest in, downstream waters that could be impacted by the Project. We are happy to provide the EAO with contact information for CSKT and KTOI.

EAO Response

As you are aware, the EAO has entered into a Memorandum of Understanding with the State of Montana (2010 *Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy between the Government of BC and the State of Montana*), which identifies that one or more representatives from state, federal and tribal governmental agencies, as appropriate, will be invited to participate in Working Groups established for its EAs, including CSKT. The EAO will send an invitation to CSKT to participate on the Working Group. As direct or cumulative effects from Michel Coal are not anticipated in the State of Idaho, the EAO welcomes further discussion with the US EPA on what the specific interests of the KTOI may be in relation to Michel Coal.

US EPA Comment #7

The Draft VC document identifies the aquatic effects pathways that would be assessed for the selected VCs (Figure 6-1). The effects pathways are based on project activities including construction, blasting, mining and storage, process plant discharge, and waste and water management. We recommend that the effects pathways also consider effects due to accidents and malfunctions that could occur such as slope failures of the waste piles, water treatment plant disruptions, etc.

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EAO Response

The EAO requested North Coal to prepare a response to this question which was provided in a tracking table to the US EPA on May 2, 2019 as part of the 2nd round of Working Group review of the draft VC Selection Document. The EAO has requested comments on the tracking table from Working Group members by May 24, 2019. Thank you again for your comments. We would be happy to set up a meeting between the US EPA and the EAO to discuss the EA process and the EAO's responses presented in this letter. We could also invite provincial permitting agencies to discuss subsequent permitting processes and the relationship to EA. Please do not hesitate to contact me at 778 698-9314 or Teresa.Morris@gov.bc.ca or Greg Ashcroft at 250 413-7615 or Greg.Ashcroft@gov.bc.ca if you have any questions or would like to set up a meeting.

Yours truly,



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Appendix A

The EVWQP can be viewed online [here](#) and sets out goals for water quality for concentrations of specific constituents stabilize and then reduce, thus limiting any additional loading of those constituents within the Elk River watershed. To meet these goals, the EVWQP:

- Identifies water quality mitigation measures that are specific to Teck's existing and future coal operations, and defines a schedule for their implementation; and
- Contains specifications applicable to all future coal operations in the Elk Valley watershed, that include:
 - Short, medium and long-term targets for selenium, cadmium, nitrate and sulphate in water and for the reduction of calcite;
 - An adaptive management approach to ensure that the plan evolves with monitoring information, outcomes of research and development, and advances in science and technology;
 - Ongoing monitoring to assess water quality and aquatic health during the implementation of the plan to confirm objectives are met; and
 - Tributary management requirements, which together with tributary management requirements in the Valley Permit, set the benchmark for minimum expectations.

The EVWQP approval letter to Teck from the Minister available online [here](#) sets additional terms that future coal developments in the Elk Valley will also be expected to fulfil. These include:

- Recommended participation on and contribution of resources to the Lake Koocanusa Monitoring and Research Working Group that was established under the 2010 Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy between the Government of BC and the State of Montana;
- Recommended involvement and contribution of resources to the establishment of a committee for including Traditional Knowledge from the Ktunaxa Nation Council;
- Strong encouragement to strive towards British Columbia Drinking Water Guidelines;
- Being prepared to implement changes in a timely manner that would achieve a new long-term standard for Selenium should a new target be determined for Koocanusa Reservoir; and
- Providing the public with timely, transparent updates and dissemination of all relevant data collected as a part of the EVWQP.